# Panasonic ideas for life





# Beautiful, Wid

Expansive Images Even When Shooting in Tig





Great wide shots of vast landscapes



MEGA O.I.S. OFF



28<sub>mm</sub>

Self-portraits with plenty of background scenery



35mm



# Intelligent Image Stabiliser Automatically Reduces Both Hand-Shake and Motion Blur



Taking Hand-Shake Out of the Picture MEGA O.I.S.
Optical Image Stabiliser

Jitter from shaky hands is far and away the biggest single cause of blurry shots. LUMIX cameras help solve this problem with an advanced optical image stabilising system that we call MEGA O.I.S. This system uses built-in gyrosensors to detect even tiny camera movement and then shifts a lens in the opposite direction to compensate. The system is completely optical - it does not affect the CCD or image processing - so you get sharp, clear images without deterioration. It lets you reduce the shutter speed more than 3 steps below\* the conventionally accepted hand-shake limit, which is calculated as 1/focal length (1 divided by the focal length). It helps achieve high-quality images in a wide range of shooting conditions such as telephoto, macro or low illumination; for situations from spur-of-the-moment shots, to self-portraits, or capturing images outdoors at night.



Reducing Blur Caused by a Subject Moving INTELLIGENT ISO CONTROL

28<sub>mm</sub>

FZ50, LX2, FX50, and FX07 feature the world's first\* "Intelligent ISO Control" in ISO sensitivity setting, which uses a circuit within Venus Engine III to detect movement within the frame and helps you get blur-free shots by automatically adjusting the ISO sensitivity (up to ISO 800) and shutter speed according to how much the subject is moving. This helps you freeze unpredictable moving subjects, and catch decisive moments that happen all of a sudden. \*As of July 19th, 2006.

#### High Sensitivity Shooting for Less Motion Blur

Models with the Venus Engine III provide up to ISO 1600\* at full resolution, minimising motion blur to capture clear shots with low-noise. The Scene mode features a High Sensitivity Mode\*\* for shooting at even higher shutter speeds. \*FZ50 and LX2. Up to ISO 1250 in the FX50 and FX07, and ISO 800 in the TZ1. \*\*Not provided on the LS2. Note that resolution is significantly lower in this mode.

Stylish Compact











Creative Compact



Run on Two AA Batteries





FX50

FX01

# e 28mm\* Shots

ht Places. Clear, Sharp Shots in Dim Lighting.



28mm\*
MEGA 0.1.S. **0N** 



Group shots that get everyone in the picture



MEGA O.I.S. OFF



MEGA O.I.S. ON

Wide views of beautiful interiors



35mm MEGA 0.1.S. OFF



MEGA O.I.S. ON

Renders Superb, True-to-Life Images with Stunning Beauty and Expressive Depth

## Lightning Speed, Superb Performance

# **VENUS ENGINE**



Venus Engine III (featured on FZ50, LX2, FX50, FX07, TZ1)
Analyses images, and makes it possible to shoot at higher IS0 settings with less noise.



**Venus Engine II** (featured on FZ7)

Maximises image quality when taking high-power zoom and wide-angle zoom shots.



**Venus Engine Plus** (featured on FX01, FX3, LZ5, LZ3, LS2) Brings the compact camera both a higher response speed and higher energy efficiency.

# LEICA DC LENS

Clear Image Rendering with Minimal Distortion LEICA DC LENS

The high-quality Leica DC lens carries on the proud tradition of its namesake, the German camera maker renowned for lenses that combine superb performance with compact size. LUMIX cameras feature LEICA DC

VARIO-ELMARIT lens. This lens system includes several aspherical lenses to compensate for spherical aberration. In addition, an advanced multi-coating process is applied to the lens surfaces to help prevent fogging caused by flare and ghosts that can occur at excessively high light levels.

\*Leica is a registered trademark of Leica Microsystems IR 6mbH. Leica DC lenses are manufactured using measurement instruments and quality assurance systems that have been certified by Leica Camera AG based on the company's quality standards.



Ultra Zoom











TZ

FZ7

FZ50

L

\*35mm-lens equivalent

# Small 28mm Wide-Angle, 3.0" LCD and Beautiful Images

28mm\* Wide-Angle Lens, 3.0" LCD with Intelligent Image Stabiliser by MEGA 0.I.S. and Intelligent ISO Control



# Bright F2.8, 28mm\* Wide-Angle LEICA DC VARIO-ELMARIT Lens

With its EA (extra-high refractive index aspherical) lens, the FX50 offers wide-angle shooting and a 3.6x optical zoom (35mm equivalent: 28 to 102mm). The wide angle conveys width and depth when shooting

landscapes, and it's ideal for shooting group portraits in a small room. The FX50 also has the Extra Optical Zoom, which brings the zoom power up to 5.5x\*\* with minimal deterioration by magnifying the image using the center of the CCD. ns equivalent \*\*Actual zoom power varies with the image size and aspect ratio



# **Intelligent ISO Control Helps Avoid Motion Blur**

In addition to low-noise shooting at up to ISO 1250 with full resolution, the FX50 features the world's first\* "Intelligent ISO Control" in ISO setting, which helps you get blur-free shots by automatically adjusting the ISO sensitivity (up to ISO 800) and shutter speed according to how much the subject is moving. The Scene mode features a High Sensitivity Mode (ISO 3200)\*\* for shooting at even higher shutter speeds. \*As of July 19th, 2006. \*\*Note that resolution is significantly lower in this mode













# High-Quality 3.0" LCD Shows You Big, Beautiful Images

The 3.0" LCD covers almost the entire camera back. The 230,000-pixel resolution guarantees clear, sharp images, and the pixel-mixed readout method of the CCD helps make even dark areas bright and easy to see. The dual-image playback display feature makes it easier to compare two images in detail to see the differences in focus accuracy

and contrast. The out-of-frame display feature shows the image within a 2.5-inch frame while showing shooting information outside the frame. And VGA-size

images in playback mode can be converted into a series of nine or just one snapshot. These smart features take advantage of the FX50's big, bright screen.





Quick Response, with 1.3 second startup 3 frames per second-MEGA BURST Consecutive Shooting Smooth Wide-Screen VGA Motion Images

#### (Standard Accessories)

- •Battery Charger •Battery Pack •Battery Carrying Case •SD Memory Card (16MB\*) •AV Cable •AC Cable •USB Cable •Strap
- •CD-ROM \*1MB = 1 million bytes. Usable capacity will be less







**Basic Functions** 













































Fashionable, Small 28mm\* Wide-Angle and Beautiful Images Sleek and Stylish Camera with Intelligent Image Stabiliser by MEGA O.I.S. and Intelligent ISO Control Makes it Easy to Catch All the Beauty LEICA 128 MEGA O.I.S. OFF

# Bright F2.8, 28mm Wide-Angle **LEICA DC VARIO-ELMARIT Lens**

The LEICA DC VARIO-ELMARIT lens featured on the FX07/FX01 employs an EA (extra-high refractive

index aspherical) lens, making it possible to incorporate a 28mm wide-angle zoom into a compact camera. In addition, the Extra Optical Zoom feature gives you up to 5.5x zoom power\* (FX07) or 5.0x zoom power\* (FX01) by magnifying the image (with minimal deterioration) using the center part of the CCD. \*Actual zoom power varies with the image size and aspect ratio

MEGA O.I.S. ON

## Minimal Motion Blur with Intelligent ISO Control

In addition to low-noise shooting at up to ISO 1250\* with full resolution, the FX07 features the world's first\*\* "Intelligent ISO Control" in ISO sensitivity setting which helps you get blur-free shots by automatically adjusting the ISO sensitivity (up to ISO 800) and shutter speed according to how much the subject is moving. \*FX01: ISO 400 \*\*As of July 19th, 2006. Not equipped with the FX01

















# 2.5" High-Resolution LCD for Brighter Viewing

With 207,000 pixels, the FX07/FX01's large 2.5" LCD shows bright, beautiful images that make it easy to frame the perfect shot. The LCD uses the pixel-mixed readout method, which automatically increases display brightness when you're shooting a dark scene. The High-Angle shooting function also provides easier viewing when you're holding the camera high to shoot over the heads of people in front of you.

# Up to 320 Shots Between Battery Charges

Thanks to the energy-saving Venus Engine III\* and a long-lasting battery, the slim DMC-FX07/FX01 takes shot after shot without running out of power. You can snap as many as 320\*\* shots on a single battery charge. \*FX07 has Venus Engine III, FX01 has Venus Engine Plus. \*\*Measured using CIPA standards. Battery charge time is affected by storage and usage conditions and the interval between shots.

**Quick Response for More Shooting Fun** 

#### (Standard Accessories)

Battery Charger •Battery Pack •Battery Carrying Case
•SD Memory Card (16MB\*) •AV Cable •AC Cable •USB Cable
•Strap •CD-ROM \*1MB = 1 million bytes. Usable capacity will be less.





\*35mm-lens equivalent



Simple and Stylish and Beautiful Images















Colour: -S (Silver)





























Accessory (Available as optional accessory)











# Full-Manual 12x Zoom Power and Beautiful Images

The Power to Create Unforgettable images with Intelligent Image Stabiliser by MEGA O.I.S. and Intelligent ISO Control. Catch Once-in-a-lifetime Moments in Clear Focus



# **LEICA DC VARIO-ELMARIT Lens with ED Lens** and Super-Powerful 12x Optical Zoom

The FZ50's LEICA DC VARIO-ELMARIT lens features 14 elements in 10 groups, including 3 aspherical lenses and an ED (extra-low dispersion) lens which helps suppress the colour bleeding that can occur in telephoto shots, plus a 12x optical zoom (35mm equivalent: 35 to 420mm). The FZ50 also features Extra Optical Zoom, which gives you up to 21.4x power\* by magnifying (with minimal deterioration) the image using the center area of the high-resolution CCD.

In addition to low-noise shooting at up to ISO 1600 with full resolution, the FZ50 features the world's first\* "Intelligent ISO Control" in ISO setting, which helps you get blur-free shots by automatically adjusting the ISO sensitivity (up to ISO 800) and shutter speed according to how

Intelligent ISO Control Forestalls Motion Blur

much the subject is moving. The Scene mode features a High Sensitivity Mode (ISO 3200)\*\* for shooting at even higher shutter speeds. \*As of July 19th, 2006. \*\*Note that resolution is significantly lower in this mode





# Accurate, Flexible Focusing Both Auto and Manual

The switch on the lens barrel makes it easy to select from one of many settings: auto-focus, AF macro and manual focus. The FZ50 also has Manual Focus Assist, which makes it easier to focus by enlarging a part of the image that you see in the viewfinder or LCD monitor.

#### Two Command Dials for Quick Settings

Two dials on the camera top make it easy to adjust the exposure setting while holding the camera to your eye. In Manual mode, one dial adjusts the aperture, the other adjusts the shutter speed. In Aperture Priority and Shutter Priority modes, one sets the aperture or shutter speed, the other sets the exposure compensation (-2 to +2 in 1/3 EV steps). The large right hand grip makes the camera easy to hold, and these dials are exactly where you need them.

Intuitive Control with Manual Focus and Zoom Rings Free-Angle 2.0" LCD with Wider Adjustment Range Accepts external TTL flash

Two axis white balance adjustment setting (blue - amber, and magenta - green) **RAW** file compatible (editable with the included software "SILKYPIX Developer Studio")

#### (Standard Accessories)

•Battery Charger •Battery Pack •SD Memory Card [32MB\*] •Lens Cap •Lens Hood •AV Cable •AC Cable •USB Cable •Strap •CD-ROM \*1MB = 1 million bytes. Usable capacity will be less.



Colour: -S (Silver). -K (Black)

















**Basic Functions** 















































CLOSE MC ND TTL REMOTE SHUTTER



# Easy-to-Use Joystick – Just Use Your Thumb

The joystick on the camera back lets you adjust the aperture, shutter speed, focus and exposure compensation while framing your shot on the LCD screen. Or simply press and hold the joystick, and you



can also change the auto focus, light metering, white balance, ISO sensitivity, image size and image quality settings - all without taking your eyes from the monitor. There's no need to switch to the menu screen.















Two axis white balance adjustment setting (blue - amber, and magenta - green) 15 fps HD-VGA (1270 x 740 pixels) and 30 fps Wide VGA Motion Images RAW file compatible (editable with the included software "SILKYPIX Developer Studio") Convenient Built-in 13MB Memory

#### (Standard Accessories)

•Battery Charger •Battery Pack •Battery Carrying Case •Lens Cap •Lens Cap Strap •AV Cable •AC Cable •USB Cable •Strap •CD-ROM







**Basic Functions** 























MEGÃ WIDE SCN SHORT WB REAL-TIME GUIDE AUTO WORLD TRAVEL RAW DATE RAW

























# Compact 12x Zoom and Beautiful Images

Small Camera with Dual Image Stabilisation Lets You Capture Clear Close-ups of Special Family Moments





1x Optical Zoom

12x Optical Z



#### LEICA DC VARIO-ELMARIT Lens with a 12x Optical Zoom

Plus, the Extra Optical Zoom function, which magnifies the image with minimal deterioration, boosts the zoom power to a maximum 16.5x\*.

#### Helps Prevent Motion Blur - High Sensitivity Mode\*

This is ideal for stopping the motion of moving subjects like children or pets to get clear, expressive shots even in insufficient lighting. \*Resolution significantly decreases.

#### A Large, Bright 2.5" LCD with High Angle Mode and In-Line Style EVF

With Power LCD button for 140% brighter and High Angle shooting function for easier viewing from below.

#### Fast, Precise Response for a High Zoom Model

The 1-point high-speed AF boasts industry-leading short shutter time lag, and you can also snap off up to 13 consecutive shots at 3 fps.

## Easy Manual Operation Using the Joystick

You can set the aperture, shutter speed and focus with your thumb while framing the shot on the LCD monitor.

#### (Standard Accessories)

- •Battery Charger •Battery Pack •SD Memory Card (16MB\*) •Lens Cap •Lens Hood •Hood Adapter •AV Cable •AC Cable •USB Cable •Strap
- •CD-ROM \*1MB = 1 million bytes. Usable capacity will be less.





**Basic Functions** 











-S (Silver), -K (Black)





s











































## A Compact 10x Optical Zoom Using a Unique Prism **LEICA DC VARIO-ELMARIT Lens**

Plus, the Extra Optical Zoom function, which magnifies the image with minimal deterioration, boosts the zoom power to a maximum 12.5x\*.

#### Recording up to ISO 800 in Full Resolution

The Venus Engine III LSI lets you use higher shutter speeds to minimize motion blur that can occur when shooting moving subjects particularly in dim lighting.

# Rapid Focusing with Linear AF

Combined with a startup time of merely 0.95 seconds, this fast focusing lets you catch every shooting opportunity.

# **Quick Response and Comfortable Shooting**

Release time lag: about 0.006 seconds; Up to 8 consecutive shots at 3 frames per second in Standard mode

#### High-Resolution 207,000-pixel 2.5-inch LCD

With Power LCD button for 140% brighter and High Angle shooting function for easier viewing from below.

#### (Standard Accessories)

•Battery Charger •Battery Pack •Lens Cap •AV Cable •AC Cable •USB Cable •Strap •CD-ROM

Accessory (Available as optional accessory)















#### **Basic Functions**





































Shooting Modes (Mode Dial)

SCN (Scene Mode)

that have been certified by Leica Camera AG based on the company's quality standards























# Easy-to-Use 6x Zoom and Beautiful Images

Compact Camera with MEGA O.I.S. to Minimise Hand-Shake, Making It Easy to Take Clear, Smooth Photos



# 6x Optical Zoom in a Compact Body with MEGA Optical Image Stabilisation

Each of these cameras combines a compact, easy-to-carry size with a powerful 6x optical zoom lens - equivalent to a 37 to 222mm lens on a 35mm camera - for dynamic close-ups or great shots from a distance. The Extra Optical Zoom function, which magnifies the image with minimal deterioration by using the center part of the high-resolution CCD, boosts the zoom power to 8.3x (LZ5) or 7.5x (LZ3)\*



1x Optical Zoom



6x Optical Zoom



8.3x\* Extra Optical Zoom (LZ5)

\*Varies depending on the selected image size and aspect ratio

# Large, Easy-to-See 2.5" LCD with High Angle Mode

The 2.5" LCD (LZ3 and LS2: 2.0") is clear, bright and easy to see even in low lighting thanks to the pixel-mixed readout method\*. It lets you frame shots more comfortably. And



when you're finished shooting, the big, bright display lets you enjoy functions like the 25-thumbnail display. These models also have the High Angle LCD shooting function, which makes it easier to see the monitor when you're holding the camera high to shoot over a crowd. \*Not

**Extended Shooting from Two AA Batteries** Convenient Built-in 14MB Memory

#### (Standard Accessories)

•AA Oxyride Battery x2 •AV Cable (LZ5) •Video Cable (LZ3) •USB Cable •Strap •CD-ROM





# 3x Optical Zoom and MEGA O.I.S. Powered by Two AA size Batteries





#### **Basic Functions**



































































# A Digital SLR that feels the way a camera should



# LEICA D Lens — The first Leica Lens designed especially for a digital SLR

- Provides F2.8-3.5 brightness from 28mm wide-angle to 100mm telephoto (35mm equivalent)
- •The lens system including two dual-sided aspherical lenses minimizes distortion in wide-angle shots and suppresses the loss of peripheral resolution
- •A superior multi-coating process helps reduce ghosts and flaring
- •MEGA 0.1.S in the lens unit helps minimise hand-shake to ensure that photos are sharp

### Intuitive form and function

- •Aperture ring equipped with the LEICA D lens for easy, direct aperture setting (F2.8 F22 in 1/3 EV steps)
- •Shutter speed dial positioned on the camera top lets you set the shutter speed from 1/2000 to 2 seconds in 1/3 EV steps
- •In manual mode, you can set the shutter speed from 1/4000 to 60 second, or you can select bulb (time lapse) shooting

#### Full-time Live View on the large, high-resolution LCD

- ullet 2.5" LCD offers 100% field of view and the clarity of 207,000 pixels
- More shooting flexibility and greater convenience by composing while viewing the LCD
- In focusing manually, you can magnify a part of the image by10x for greater focusing precision
- Precise preview of the depth of field, as the display is bright and easy to see, without darkening

#### 7.5-megapixel, 4/3-type Live MOS sensor

- •Offers image quality comparable to a CCD sensor with the low power requirements of a CMOS sensor
- •Low Noise thanks to a dedicated processing technology run on voltage as low as 5 V

### Protecting the digital SLR image sensor: Dust Reduction System

Incorporates a Supersonic Wave Filter that uses supersonic vibration (around 30,000 per second) to shake off any dust clinging to the sensor

# Venus Engine III reproduces even nuances in texture and atmosphere

- •Precisely reproduces the images captured by the Leica D lens and sent to the Live MOS sensor
- •Quick startup time of one second and improved consecutive shooting performance
- $\bullet \mathsf{Low}$  power consumption for more shots and longer shooting sessions

# Film Mode: choose the imaging mode that best suits your creative intent

Just as photographers can switch film brands to change the imaging characteristics, the L1 provides a total of seven "film" modes to choose from, including four color settings (Standard, Dynamic, Natural and Smooth) and three monochrome settings (Standard, Dynamic and Smooth).

### **Standard Accessories**

•Battery Charger/AC adaptor •Battery Pack •Eyepiece Cap •Body Cap •Video Cable •USB Cable •AC Cable •DC Cable •Strap •CD-ROM



## Optional Accessories\*

- •Battery Pack CGR-S003 •Remote Shutter DMW-RSL1 •MC Protector DMW-LMCH72 •PL Filter DMW-LPL72 •External Flash (GN50) DMW-FL500 •External Flash (GN36) DMW-FL360
- \* Not all accessories are available in all countries

The L1 can be used with Four Thirds lenses and other accessories made by a variety of manufacturers (e.g. Zuiko and SIGMA), giving you a host of equipment options.



Complies with Four Thirds\* standard The DMC-L1's lens mount system adopts the open format of the Four-Thirds system, developed as a common standard for digital cameras. In the Four Thirds system, the lens diameter is larger than the image circle, making it possible to design the lens so that the light passes on a straight path to the image sensor. As a result, lenses for digital cameras can be created in a size smaller than those that complied with 35mm film SLR camera standards, meeting the needs of today's digital age. \*Four Thirds is a registered trademark.

<sup>\*</sup> Leica is a registered trademark of Leica Microsystems IR GmbH.

The Leica D lenses are manufactured using measurement instruments and quality assurance systems that have been certified by Leica Camera AG based on the company's quality standards.

# SD Memory Cards Expand the World of LUMIX Images in the Living Room



\* Not all products shown are available in all countries

# Options that give you more comfort. More creativity. More fun.





























\*Necessary to use DMW-LA2.
•Some accessories are not available in some countries.

# A Wealth of Functions Adds to Your Shooting Fun

#### **Basic Functions**



#### **Auto Focus mode**

#### 1-point AF

While we have minimised screen-freeze in high-speed auto focusing, we recommend using this mode when shooting fast-moving subjects. There will be no screen-freeze at all as you focus.



#### 1-point high-speed AF

We've dramatically reduced high-speed auto focusing time compared with normal-speed focus time. Focusing performance is outstanding.



This mode keys the focus to a small area within the frame.



#### 3-point high-speed AF

This mode prevents the system from mistakenly focusing on the area between two subjects in a horizontal composition.



#### 5-point AF (models with VENUS ENGINE PLUS)

This mode prevents the system from mistakenly focusing on the area between two subjects in a vertical composition



#### 9-point AF (models with VENUS ENGINE II or III)

This mode, used for general shooting, provides a sharp focus in a variety of picture compositions.



# **AF Assist Lamp**

For use in dim lighting, this lamp slightly illuminates the subject to help the AF system focus correctly.



#### **Manual Focus Assist**

Magnifies the image centre by 3x in the viewfinder or LCD, making it easier for you to check the focus.







### Select Among 3 Aspect Ratios

In addition to the conventional 4:3 image format, you can select the 16:9 or 3:2 format to suit the shot you're composing. 16:9 images are perfect for viewing on a wide-screen TV. Simply slip the SD Memory Card into a wide-screen TV with an SD slot and you're ready for incredible

a plasma display panel to show 16:9 images recorded on an SD the images may not fill the entire screen







**High Angle Mode** 

This makes it easier to see the monitor when you're holding the camera high to shoot over a crowd.









# Power LCD

The LCD backlight becomes about 40% brighter, so images are easy to see even in bright sunlight.





## Color EVF (Electric Viewfinder)

The visual field is close to 100%, so you see virtually the entire image in the frame

## **Unlimited Consecutive Shooting**

You can keep shooting until the memory card or built-in memory is full. Take a series of shots, then choose the ones you like best and delete the rest.



#### Wide VGA Motion Image

Record smooth, beautiful wide VGA-size (848 x 480 pixels) motion images at 30 frames per second - perfect for viewing on a wide-screen TV.

"When recording motion images with the picture quality set to [wide VGA, 30fps], we recommend that you use a high-speed SD Memory Card that says "10 MB/s" or greater on the package.



# SCN HELP Scene Mode Help Screen

scene mode is displayed, making it easier for you to choose the one that's best for the conditions.





SCENE MODE



#### **Shortcut Setting**

Press and hold down the joystick or "FUNCTION" button, and you can instantly access the frequently used settings, such as white balance, ISO sensitivity, image size, compression format, auto focus mode, and light metering.





## White Balance Adjustment

When it's difficult to get the exact colouration you want, you can add bluish or reddish tones in ±10 steps of 150 Kelvin each\*. The FZ50 and LX2 let you make adjustments on both the red/blue



axis and the magenta/green axis in ±9 steps



# **Real-Time Histograms**

This graph, which can be displayed in the LCD as you compose the shot, shows the status of the exposure and contrast in real-time.





# **Composition Guide Lines**

Displayed in the LCD, these thin horizontal and vertical lines make it easier to compose shots and hold the camera level. The new models also display the guide lines together with shooting information for greater shooting precision.





#### Auto Bracketing

This shoots three shots at slightly graduated exposures (+1 to -1 in 1/3 EV steps). Pick the best of the three to keep.



# **World Time Setting**

If you select a travel destination, the camera calculates the time difference from the time in the clock setting and displays the local time. You can set the time and date for 74 locations across the world.





### **Travel Date Setting**

Input the time and date of departure before you leave home, then use the camera to capture all the best



moments of your trip. When you view the photos later, the camera will display them according to the day of the trip each photo was taken



### RAW RAW\* format compatible

In this format the image data is recorded directly from the

In this format the image data is recorded directly from : CCD in its original, unprocessed form.

"The "PHOTOfunSTUDIO -viewer-" and ArcSoft "PhotoImpression" software util included on the CD-ROM that comes with LUMIX cameras are designed only to cor RAW flies inio JPEG images. If you want to develop the RAW flies and adjust in parameter and the software can have been software can have a software can have a software can have a software can have flaw flies and software can have flaw flies from your camera, see the software maker's Websit Adobe (Photoshop Elements 4.0, Photoshop CS2) http://www.adobe.com/lchikawa Soft Laboratory (SILKYPIX/Pediper Studio2.0) http://www.isl.co.jp/SILKYPIX/english/

## Shooting Functions (Mode Dial/Scene Mode)



# Normal Picture Mode (Program AE)

The camera automatically determines the subject's brightness and sets the aperture and shutter speed accordingly. You can adjust the white balance, ISO sensitivity and other settings\*.

These settings can be adjusted in all modes except Simple and Motion Image modes



# Simple Mode

The camera makes virtually all of the settings for you, so even first-time users can take beautiful photos. Press and hold the cursor key to turn on the backlight compensation function.







# Macro Mode

Use this mode to take incredible close-ups. You can focus on subjects within about 5 cm (0.16 ft) of the lens\*



# Tele Macro (FZ7)

Set the zoom to maximum telephoto and you can take dramatic close-ups at a distance of 1 m (3.28 ft) from the subject, with the background in soft focus.



# **Economy Mode**

Saves battery power by turning off the LCD after a certain

amount of idle time. Choose from two economy levels. Level 1: LCD turns off when the camera has been idle for 15 seconds.

Level 2: Same as Level 1, plus the LCD turns off when the camera has been idle for 5 seconds after taking a shot.



# **Auto Mode**

Take beautiful photos right out of the box - even if you've never used a digital camera. The camera makes all the settings, you just aim and press the shutter button. If you're shooting directly toward the light, hold the cursor button down to turn on the backlighting compensation function, so the subject doesn't appear too dark.



# Program AE Mode

In this mode the camera makes the optimal aperture and shutter speed settings for you.



# **Aperture Priority AE Mode**

You set the aperture for the kind of shot you want\*, and the camera sets the shutter speed accordingly. \*The aperture can be set from F2.8 to F8.0 [F11.0 in the FZ50].



# Shutter Priority AE Mode

Set the shutter speed between 1/2000 and 8 seconds to freeze or convey motion, and the camera sets the aperture accordingly.



#### Manual Exposure Mode

You have full control over both the shutter speed and aperture. With shutter speeds from 1/2000 to 60 seconds and aperture settings (F stops) from F2.8 to F8.0 (F11.0 in the FZ50), you get a range of artistic possibilities to explore. You can also choose noise reduction when shooting at slow shutter speeds.

#### Manual Exposure Assist

When you're in manual mode, this function shows how much your exposure setting differs from the setting the camera considers optimal.





#### Motion Image Mode

The camera can record smooth, beautiful VGA-size (640 x 480 pixels) motion images at 30 frames per second. The CCD uses the pixel-mixed readout method, which enhances the brightness level.



#### Plavback Mode

After shooting, enjoy viewing your photos on your LUMIX camera's clear, bright, high-resolution LCD. View them as a slide show; display 1, 9 or 25 images at a time; or use Calendar View\* to see thumbnails of all the shots taken on a particular date.







\*Not on all models

**Custom Mode** 

You can store in memory up to three sets of frequently used settings, such as the scene mode, white balance and AF and photometry modes. Later, you can instantly recall those settings by selecting Custom Mode.





сиѕтом

#### **Print Mode**

Make settings in a PictBridge-compatible printer without the menu screen. If you're using a Panasonic KX-PX10/KX-PX1 dve sublimation printer, the printer can make corrections based on information in the camera to produce prints with enhanced beauty.



#### Scene Mode

Select one or two of the following modes according to the shooting conditions. Pressing the left side of the cursor button opens a help screen that explains what each mode is for.



# **High Sensitivity Mode**

This mode raises the ISO sensitivity to 3200 or 1600, which lets you shoot at a higher shutter speed to reduce motion blur or capture clear, sharp shots of moving subjects in dim lighting without a flash. The image quality is sufficient

for making the normal-size 4" x 6" (10 x 15 cm) prints. \*Note that resolution is significantly lower in this mode.





High Sensitivity Mode



#### Portrait Mode

Adjusts the exposure and coloration so that skin tones look true and natural.





#### Sports Mode

Uses a higher shutter speed, making it possible to catch clear, sharp, dynamic action shots



# 101

### Food Mode

Good for taking shots of special meals, this mode assures that colours are fresh, vivid and natural in all kinds of lighting.





#### Scenery Mode

Provides quick focusing and crisp detail especially good for shooting landscapes or scenery.





#### **Night Portrait Mode**

Uses slower shutter speeds and activates MEGA O.I.S. to minimise hand-shake, letting you get clear, crisp images at night.





#### **Night Scenery Mode**

Lets you get beautiful photos at night of illuminated landscapes or buildings.





# Baby Mode (1 and 2)

Input the date of your baby's birthday, and keep a running photographic record as he or she grows up. Skin tones are slightly softened to enhance beauty. You can set two birth dates to track two different children.





#### Soft Skin Mode

This softens the tone in skin-color areas, making minor blemishes and wrinkles less noticeable. Other parts of the picture are unchanged.





#### Candle Light Mode

This mode lets you capture the naturally warm color of scenes lit by candles.





#### **Party Mode**

This mode adjusts the exposure and turns on MEGA 0.1.S. so you can capture crisp, clear images and true-to-life colors indoors in dim lighting.





#### Fireworks Mode

Uses a slower shutter speed to capture the glittering beauty of fireworks.





#### Snow Mode

Keeps subjects from looking washed out in scenes with bright surroundings.





# Starry Sky Mode

Uses shutter speeds as slow as 15, 30 or 60 seconds to capture shots of the night sky or other nighttime scenes.





### Self-Portrait Mode

Aim the camera at yourself, wait for the LED to light up (indicating that you're in focus), and take the shot.





## Panning Mode

Conveys a sense of motion by capturing a moving subject in crisp focus and blurring the background





#### **Beach Mode**

Ideal for taking shots in bright, direct sunlight





## **Underwater Mode**

Intended especially for underwater use with the optional Marine Case, this mode gives photos natural colouring even when the subject is lit by only a small amount of light.





#### **Aerial Photo Mode**

For shooting through an airplane window.



# Accessory (Available as optional accessory)



# **Tele-Conversion Lens**

Increases your total zoom power. Gives you the power to bring even more distant objects into range.



#### Wide Conversion Lens

Increases the field of view at lower zoom settings, so you can shoot a wider area.



#### Close-up lens

The convex surface of the lens acts like a magnifying glass, letting you take dramatic close-ups.



# **MC Protector**

Protects the camera lens from scratches and other damage.



# ND (neutral density) filter

Reduces the amount of light passing through the lens, so you can use both maximum aperture and slower shutter speeds in bright sunshine.



# **External TTL Flash**

Mountable on some LUMIX models, this adds greater TTL flash power. Use it in situations where the built-in flash is inadequate, such as when the subject is beyond its effective range.



## Marine Case

Explore the exciting world of underwater photography. You can also use this waterproof case for worry-free shooting in wet weather, at the beach, or on the ski slopes.



#### Remote Shutter

Suppresses even the tiny movement or vibration that occurs when you press the shutter release button. Especially useful when shooting at slow shutter speeds, when the effects are magnified.



# **Specifications**

	FZ50	FZ7	FX50	FX07	FX01	FX3
Lens	LEICA DC VARIO-ELMARIT	LEICA DC VARIO-ELMARIT	LEICA DC VARIO-ELMARIT	LEICA DC VARIO-ELMARIT	LEICA DC VARIO-ELMARIT	LEICA DC VARIO-ELMARIT
		11 elements in 8 groups (3 aspherical lenses)	7 elements in 6 groups (4 aspherical lenses)	7 elements in 6 groups (4 aspherical lenses)	7 elements in 6 groups (4 aspherical lenses)	7 elements in 6 groups (3 aspherical lenses)
Optical Zoom	12x	12x	3.6x	3.6x	3.6x	3x
	21.4x (except for the maximum image size for each aspect ratio)	16.5x (except for the maximum image size for each aspect ratio)	5.5x (except for the maximum image size for each aspect ratio)	5.5x (except for the maximum image size for each aspect ratio)	5x (except for the maximum image size for each aspect ratio)	4.1x (except for the maximum image size for each aspect ratio)
Digital Zoom	2x/4x pre-select (Max. 85.5x combined with Extra Optical Zoom)	4x (Max. 66x combined with Extra Optical Zoom)	4x (Max. 21.9x combined with Extra Optical Zoom)	4x (Max. 21.9x combined with Extra Optical Zoom)	4x (Max. 20x combined with Extra Optical Zoom)	4x (Max. 16.5x combined with Extra Optical Zoom)
Focal Distance	f=7.4 - 88.8 mm	f=6 - 72 mm	f=4.6 - 16.8 mm	f=4.6 - 16.8 mm	f=4.6 - 16.8 mm	f=5.8 - 17.4 mm
Focusing Area	(35 mm equiv.: 35 - 420 mm)  Normal: 30 cm (W)/200 cm (T) - ∞,	[35 mm equiv.: 36 - 432 mm] Normal: 30 cm (W)/200 cm (T) - ∞, Simple/Macro/A/S/M: 5 cm (W)/	[35 mm equiv.: 28 - 102 mm]  Normal: 50 cm - ∞,  Macro/Simple: 5 cm (W)/	[35 mm equiv.: 28 - 102 mm] Normal: 50 cm - ∞, Macro/Simple: 5 cm (W)/	[35 mm equiv.: 28 - 102 mm] Normal: 50 cm - ∞, Macro/Simple: 5 cm (W)/	(35 mm equiv.: 35 - 105 mm)  Normal: 50 cm - ∞, Macro/Simple: 5 cm (W)/
MEGA O.I.S.	Macro: 5 cm (W)/200 cm (T) - ∞  Yes (Mode1/Mode2)	200 cm (T) - ∞, Tele-Macro: 100 cm (T) - ∞ Yes (Mode1/Mode2)	30 cm (T) - ∞ Yes (Mode1/Mode2)	30 cm (T) - ∞ Yes (Mode1/Mode2)	30 cm (T) - ∞ Yes (Mode1/Mode2)	30 cm (T) - ∞ Yes (Mode1/Mode2)
Conversion Lens Camera Effective	Yes	Yes (requires lens adapter DMW-LA2)	-	-	-	-
Pixels	1/1.8", 10.4 Mega Total Pixel CCD,	6.0 Megapixels  1/2.5", 6.37 Mega Total Pixel CCD,	7.2 Megapixels  1/2.5", 7.38 Mega Total Pixel CCD,	7.2 Megapixels  1/2.5", 7.38 Mega Total Pixel CCD,	6.0 Megapixels  1/2.5", 6.37 Mega Total Pixel CCD,	6.0 Megapixels  1/2.5", 6.37 Mega Total Pixel CCD,
Focus	AF/AF-Macro/MF switchable, Manual Focus (ring),	Primary Color Filter  AF/MF switchable, Manual Focus (joystick), Normal/Macro (dial),	Primary Color Filter  Auto Focus System, Normal/Macro (dial)	Primary Color Filter  Auto Focus System, Normal/Macro (dial)	Primary Color Filter  Auto Focus System, Normal/Macro (dial)	Primary Color Filter  Auto Focus System, Normal/Macro (dial)
AE Motorina		Continuous AF On/Off  1 & 9 point, 1 & 3 point high-speed, Spot	1 & 9 point, 1 & 3 point high-speed, Spot	1 & 9 point, 1 & 3 point high-speed, Spot	1 & 5 point, 1 & 3 point high-speed, Spot	1 & 5 point, 1 & 3 point high-speed, Spot
AF Assist Lamp	Yes	Yes	Yes	Yes	Yes	Yes
White Balance	[High Sensitivity mode: 3200] Auto/Daylight/Cloudy/Shade/ Halogen/Flash/White Set 1&2; 2-Axis Adjustable in ±9 steps		Auto/I.ISO/100/200/400/800/1250 [High Sensitivity mode: 3200] Auto/Daylight/Cloudy/Shade/ Halogen/White Set; Adjustable in ±10 steps (except Auto)	Auto/I.ISO/100/200/400/800/1250 (High Sensitivity mode: 3200) Auto/Daylight/Cloudy/Shade/ Halogen/White Set; ) Adjustable in ±10 steps (except Auto)	Auto/80/100/200/400 [High Sensitivity mode: 800 - 1600] Auto/Daylight/Cloudy/Halogen/ White Set; ] Adjustable in ±10 steps (except Auto)	Auto/100/200/400 [High Sensitivity mode: 800 - 1600] Auto/Daylight/Cloudy/Shade/ Halogen/White Set; Adjustable in ±10 steps (except Auto)
Exposure	Auto/Program AE/ Aperture Priority AE/ Shutter Priority AE/Manual	Program AE/ Aperture Priority AE/ Shutter Priority AE/Manual	Program AE	Program AE	Program AE	Program AE
Mode Dial	Fireworks/Snow/Starry Sky/ Baby 1&2/High Sensitivity)/	P/A/S/M/Simple/Macro/SCN [Portrait/Soft Skin/Scenery/Sports/ Night Portrait/Night Scenery/ Panning/Food/Party/Candle Light/ Fireworks/Starry Sky/Snow/ Babyl 82/High Sensitivity/ Motion Image/Playback	Simple/Normal/Macro/SCN [Portrait/Soft Skin/Scenery/Sports/ Night Portrait/Night Scenery/ Self-Portrait/Food/Party/ Candle Light/Fireworks/Starry Sky/ Baby 1&2/Snow/High Sensitivity/ Aerial Photo/Beach)/Motion Image/ Playback/Print	Simple/Normal/Macro/SCN  Portrait/Soft Skin/Scenery/Sports/ Night Portrait/Night Scenery/ Self-Portrait/Food/Party/ Candle Light/Fireworks/Starry Sky/ Baby 1&2/Snow/High Sensitivity/ Underwater/Aerial Photo/Beach// Motion Image/Playback	Simple/Normal/Macro/SCN (Portrait/Soft Skin/Scenery/Sports/ Night Portrait/Night Scenery/ Self-Portrait/Food/Party/ Candle Light/Fireworks/Starry Sky/ Baby 1&2/Snow/High Sensitivity/ Underwaterl/Motion Image/Playback	Simple/Normal/Macro/SCN [Portrait/Soft Skin/Scenery/Sports/ Night Portrait/Night Scenery/ Self-Portrait/Poad/Party/ Candle Light/Fireworks/Starry Sky/ Baby 182/Snow/High Sensitivity/ Underwater]/Motion Image/Playback
Exposure Compensation	1/3 EV step, -2 - +2 EV	1/3 EV step, -2 - +2 EV	1/3 EV step, -2 - +2 EV	1/3 EV step, -2 - +2 EV	1/3 EV step, -2 - +2 EV	1/3 EV step, -2 - +2 EV
Backlight Compensation	Yes (in Auto mode)	Yes (in Simple mode)	Yes (in Simple mode)	Yes (in Simple mode)	Yes (in Simple mode)	Yes (in Simple mode)
	±1/3 EV - 1 EV step, 3 frames Intelligent Multiple/	±1/3 EV - 1 EV step, 3 frames Intelligent Multiple/	±1/3 EV - 1 EV step, 3 frames	±1/3 EV - 1 EV step, 3 frames	±1/3 EV - 1 EV step, 3 frames	±1/3 EV - 1 EV step, 3 frames
	Center Weighted/Spot	Center Weighted/Spot	Intelligent Multiple	Intelligent Multiple	Intelligent Multiple	Intelligent Multiple
Charter Carrel	Auto: 1/4 - 1/2000 sec, P: 1 - 1/2000 sec,	Wide: F2.8 - F8.0, Tele: F3.3 - F8.0 8 - 1/2000 sec	2 steps: F2.8/F8.0 (W), F5.6/F16 (T) 8 - 1/2000 sec	2 steps: F2.8/F8.0 (W), F5.6/F16 (T) 8 - 1/2000 sec	2 steps: F2.8/F5.6 (W), F5.6/F11 (T) 8 - 1/2000 sec	2 steps: F2.8/F5.6 (W), F5.0/F10 (T) 8 - 1/2000 sec
	A/S: 8 - 1/2000 sec, M: 60 - 1/2000 sec  Contrast/Sharpness/Saturation/	[Starry Sky mode: 15/30/60 sec] Contrast/Sharpness/Saturation/	(Starry Sky mode: 15/30/60 sec)	(Starry Sky mode: 15/30/60 sec)	(Starry Sky mode: 15/30/60 sec)	(Starry Sky mode: 15/30/60 sec)
Picture Adjustment	Noise Reduction	Noise Reduction	Natural/Standard/Vivid	Natural/Standard/Vivid	Natural/Standard/Vivid	Natural/Standard/Vivid
Recording Format	compatible; Images w/ Audio: JPEG (DCF/Exif2.2 compliant) + QuickTime; Motion Images:	+ QuickTime; Motion Images:	Still Images: JPEG [DCF/Exif2.2 compliant], DPOF compatible; Images w/ Audio: JPEG [DCF/Exif2.2 compliant] + QuickTime; Motion Images: QuickTime Motion JPEG	Still Images: JPEG [DCF/Exif2.2 compliant], DPOF compatible; Images w/ Audio: JPEG [DCF/Exif2.2 compliant] + QuickTime; Motion Images: QuickTime Motion JPEG	Still Images: JPEG [DCF/Exif2.2 compliant], DPOF compatible; Images w/ Audio: JPEG [DCF/Exif2.2 compliant] + QuickTime; Motion Images: QuickTime Motion JPEG	Still Images: JPEG [DCF/Exil2.2 complaint], DPOF compatible; Images w/ Audio: JPEG [DCF/Exil2.2 complant] + QuickTime; Motion Images: QuickTime Motion JPEG
Recording Pixels	2560 X 1712, 2048 X 1360;	[4:3] 2816 x 2112, 2304 x 1728, 2048 x 1536, 1600 x 1200, 1280 x960, 640 x 480; [3:2] 2816 x 1880, 2048 x 1360; [16:9] 2816 x 1584, 1920 x 1080	[4:3] 3072 x 2304, 2560 x 1920, 2048 x 1536, 1600 x 1200, 1280 x 960, 640 x 480; [3:2] 3072 x 2048, 2048 x 1360; [16:9] 3072 x 1728, 1920 x 1080	[4:3] 3072 x 2304, 2560 x 1920, 2048 x 1536, 1600 x 1200, 1280 x 960, 640 x 480; [3:2] 3072 x 2048, 2048 x 1360; [16:9] 3072 x 1728, 1920 x 1080	[4:3] 2816 x 2112, 2048 x 1536, 1600 x 1200, 1280 x 960, 640 x 480; [3:2] 2816 x 1880, 2048 x 1360; [16:9] 2816 x 1584, 1920 x 1080	[4:3] 2816 x 2112, 2048 x 1536, 1600 x 1200, 1280 x 960, 640 x 480; [3:2] 2816 x 1880, 2048 x 1360; [16:9] 2816 x 1584, 1920 x 1080
Image Quality		TIFF/Fine/Standard	Fine/Standard	Fine/Standard	Fine/Standard	Fine/Standard
	[16:9] 848 x 480 pixels; 30 or 10 fps		· ·	1 1	1 1	[4:3] 640 x 480/320 x 240, [16:9] 848 x 480 pixels; 30 or 10 fps
(with full resolution)	3 (Fine) images	3 or 2 fps, Max. 13 (Standard)/ 7 images (Fine)	3 or 2 fps, Max. 8 (Standard)/ 6 (Fine) images	3 or 2 fps, Max. 8 (Standard)/ 6 (Fine) images	3 or 2 fps, Max. 8 (Standard)/ 6 (Fine) images	3 or 2 fps, Max. 8 (Standard)/ 6 (Fine) images
Consecutive Shooting	Yes	Yes	Yes	Yes	Yes	Yes
Built-in Flash	-2 - +2 EV in 1/3 EV steps	Flash Output Adjustment: -2 - +2 EV in 1/3EV steps	Auto, Auto/Red-eye Reduction, Slow Sync./Red-eye Reduction, Forced On/Off	Auto, Auto/Red-eye Reduction, Slow Sync./Red-eye Reduction, Forced On/Off	Auto, Auto/Red-eye Reduction, Slow Sync./Red-eye Reduction, Forced On/Off	Auto, Auto/Red-eye Reduction, Slow Sync./Red-eye Reduction, Forced On/Off
Flash Range	0.3 - 5.6 m (T)		ISO Auto: 0.6 - 4.0 m (W)/ 0.3 - 2.0 m (T)	ISO Auto: 0.6 - 4.0 m (W)/ 0.3 - 2.0 m (T)	ISO Auto: 0.6 - 4.0 m (W)/ 0.3 - 2.0 m (T)	ISO Auto: 0.3 - 4.0 m (W)/ 0.3 - 2.2 m (T)
	Approx. 100% coverage	- 0.33" Color EVF (114k pixels), Approx. 100% coverage	-	-	-	-
LCD Monitor	Free-angle 2.0" Polycrystalline TFT LCD (207k pixels), Approx. 100% coverage	2.5" Polycrystalline TFT LCD Display (114k pixels), Approx. 100% coverage	(230k pixels), Approx. 100% coverage	2.5" Polycrystalline TFT LCD (207k pixels), Approx. 100% coverage	2.5" Polycrystalline TFT LCD (207k pixels), Approx. 100% coverage	100% coverage
, , , , , , , , , , , , , , , , , , ,	SD Memory Card/ SDHC Memory Card/ MultiMediaCard	SD Memory Card/ MultiMediaCard	SD Memory Card/ SDHC Memory Card/ MultiMediaCard	SD Memory Card/ SDHC Memory Card/ MultiMediaCard	SD Memory Card/ SDHC Memory Card/ MultiMediaCard	Built-in Memory/SD Memory Card/ SDHC Memory Card/ MultiMediaCard
Built-in Memory Microphone/Speaker	Yes/Yes	- Yes/Yes	- Yes/Yes	- Yes/Yes	- Yes/Yes	13.5MB Yes/Yes
Interface	DC Input, AV Output (NTSC/PAL), USB	DC Input, AV Output (NTSC/PAL), USB	DC Input, AV Output (NTSC/PAL), USB	DC Input, AV Output (NTSC/PAL), USB	DC Input, AV Output (NTSC/PAL), USB	DC Input, AV Output (NTSC/PAL), USB
Dower Source	Li-ion Battery Pack (7.2V, 710mAh),		PictBridge Li-ion Battery Pack (3.7V, 1150mAh),			PictBridge Li-ion Battery Pack (3.7V, 1150mAh),
		AC Adapter (optional) 320 images (CIPA**)	AC Adapter (optional) 300 images (CIPA**)	AC Adapter (optional) 320 images (CIPA**)	AC Adapter (optional) 300 images (CIPA**)	AC Adapter (optional) 320 images (CIPA**)
Dimensions (approx.)(W x H x D)	131.2 x 85.5 x 142mm	112.5 x 72.2 x 79.0 mm	97.7 x 57.1 x 25.1 mm	94.1 x 51.1 x 24.2 mm	94.1 x 51.1 x 24.2 mm	94.1 x 51.1 x 24.2 mm
Weight (approx.)	668 g (camera body only)	310 g (camera body only)	151 g (camera body only)	132 g (camera body only)	132 g (camera body only)	125 g (camera body only)
Standard Accessories	Lens Hood, AV Cable, AC Cable, USB Cable, Strap, CD-ROM (LUMIX Simple Viewer, PhotofunStudio-viewer-, ArcSoft PhotoImpression, ArcSoft PanoramaMaker, SILKYPIX Developer Studio, Adobe Reader, QuickTime,	Lens Hood, Lens Hood Adapter, AV Cable, AC Cable, USB Cable, Strap, CD-ROM (LUMIX Simple Viewer, PHOTOfunSTUDIO-viewer-,	Battery Charger, Battery Pack, Battery Carrying Case, SD Memory Card [16MB], AV Cable, AC Cable, USB Cable, Strap, CD-ROM (LUMIX Simple Viewer, ArcSoft PhotoBase, ArcSoft PhotoImpression, ArcSoft Panorama Maker, USB Driver	Battery Charger, Battery Pack, Battery Carrying Case, SD Memory Card (16MB), AV Cable, AC Cable, USB Cable, Strap, CD-ROM (LUMIX Simple Viewer, ArcSoft PhotoBase, ArcSoft Photolmpression, ArcSoft Panorama Maker, USB Driver)	Battery Charger, Battery Pack, Battery Carrying Case, SD Memory Card (16MB), AV Cable, AC Cable, USB Cable, Strap, CD-ROM (LUMIX Simple Viewer, ArcSoft PhotoBase, ArcSoft PhotoImpression, ArcSoft Panorama Maker, USB Driver)	Battery Charger, Battery Pack, Battery Carrying Case, AV Cable, AC Cable, USB Cable, Strap, CD-ROM (LUMIX Simple Viewer, ArcSoft PhotoBase, ArcSoft PhotoBase, ArcSoft Photorama Maker, USB Driver

\*Number of shots may vary depending on memory card size, battery power, picture size, and compression. The consecutive shooting speed varies depending on the memory card or the built-in memory. \*\*Based on the CIPA standard. Using a Panasonic SD Memory Card and supplied batteries. The CIPA (Camera & Imaging Products Association) creates standards for measuring battery life. CIPA measurement method: Switch on the power and LCD, begin shooting in 30 seconds, switch between telephoto and wide-angle every 30 seconds, fire the flash every other shot. After each series of 10 shoots, turn the camera off until the battery cools. Ambient conditions: 23°C temperature and 50% humidity. The battery life differs depending on the condition of storage or use, and the environment. The number of recordable pictures varies depending on the recording interval time. If the recording interval time becomes longer, the number of recordable pictures secreases.

\*LUMIX Simple Viewer, PH0T0funSTUDIO-viewer-: Require Microsoft® Windows® 985E/Me/2000/XP, ArcSoft® PhotoBase™, PhotoImpression™, Panorama Maker™: Require Microsoft® Windows® 985E/Me/2000/XP, or Apple® Mac OS® 9 or X [Classic mode]. SILKYPIX® Developer Studio: Requires Microsoft® Windows® 985E/Me/2000/XP (Recommending Windows® 2000/XP; Only a systems administrator with authority to install software on a Windows® XP/2000], or Apple® Mac OS® X v10.2 or newer (Version 10.3 or later is recommended). \*Weight and dimensions shown are approximate. \*Design, functions, and specifications are subject to change without notice. \*Some sample images are simulated. \*Some accessories are not available in some countries. \*The use of recorded or printed materials that are protected by copyright for any purpose other than personal enjoyment is prohibited, as it would infringe upon the rights of the copyright holder. \*Leica is a registered trademark of Leica Camera AG. \*LEICA De VARIO-ELMARIT, LEICA De VARIO-ELMARIT lenses are manufactured usign measurement instruments and quality assurance systems that have been certified by Leica Camera AG based on the company's quality standards. \*Microsoft® and Windows® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. \*Adobe® Reader™ are trademarks of Adobe Systems Incorporated in the United States and/or other countries. \*Quality and Mac OS® are either registered trademarks or trademarks of Apple Computer, Inc. in the United States and/or other countries. \*Quality and Mac OS® are either registered trademarks or trademarks of Apple Computer, Inc. in the United States and/or other countries. \*Quality and Mac OS® are either registered trademarks or trademarks of Apple Computer, Inc. in the United States and/or other countries. \*Quality and the Camera AG and Systems and products mentioned in this brochure are usually the registered trademarks of the manufacturers who developed the system or product concerned.\*Number of shots may

	LX2	T71	1 75	1 73	152		I 1
	LEICA DC VARIO-ELMARIT	LEICA DC VARIO-ELMARIT	LUMIX DC VARIO	LUMIX DC VARIO	LUMIX DC VARIO	Camera Effective	7.5 Meganiyels
	9 elements in 8 groups (3 aspherical lenses)	10 elements in 12 groups (3 aspherical lenses)	8 elements in 7 groups	8 elements in 7 groups	7 elements in 6 groups (3 aspherical lenses)	Pixels	= :
	4x	10x	6x	6x	3x	Image Sensor	Total Pixel Live MOS sensor,
	[4:3] 6.2x, [3:2] 5.6x, [16:9] 5.5x (any resolution except the maximum	12.5x (except for the maximum image size for each aspect ratio)	8.3x (except for the maximum image size for each aspect ratio)	7.5x (except for the maximum image size for each aspect ratio)	3.8x (except for the maximum image size for each aspect ratio)	Mount	Four Thirds mount
		4x (Max. 50x combined	4x (Max. 33x combined	4x (Max. 30x combined	4x (Max. 15x combined	Dust Reduction System	Supersonic Web Filter
	with Extra Optical Zoom) f=6.3 - 25.2 mm (35 mm equiv.:	with Extra Optical Zoom) f=5.2 - 52 mm	with Extra Optical Zoom) f=6.1 - 36.6 mm	with Extra Optical Zoom)	with Extra Optical Zoom) f=5.8 - 17.4 mm	Digital Zoom	2x, 4x (Live View only)
	28 - 112 mm in 16:9 aspect mode)	(35 mm equiv.: 35 - 350 mm)	(35 mm equiv.: 37 - 222 mm)	(35 mm equiv.: 37 - 222 mm)	(35 mm equiv.: 35 - 105 mm)	Extra Optical Zoom	with full pixel recording. Magnification
	Normal: 50 cm (W)/100 cm (T) - ∞,	Normal: 40 cm (W)/200 cm (T) - ∞,	Normal: 50 cm (W)/120 cm (T) - ∞,	Normal: 50 cm (W)/120 cm (T) - ∞,	Normal: 50 cm - ∞,		Type: TTL Phase Difference
	Macro: 5 cm (W)/30 cm (T) - ∞	Macro/Simple: 5 cm (W)/100 cm (T) - ∞	Macro/Simple: 5 cm [W]/50 cm [T] - ∞	Macro/Simple: 5 cm (W)/50 cm (T) - ∞	Macro/Simple: 5 cm (W)/30 cm (T) - ∞	Focus	Detection System; Modes: AFS/AFC/MF
	Yes (Mode1/Mode2)	Yes (Mode1/Mode2)	Yes (Mode1/Mode2)	Yes (Mode1/Mode2)	Yes (Mode1/Mode2)	AF Assist Lamp	YES
П	10.2 Megapixels	5.0 Megapixels	6.0 Megapixels	5.0 Megapixels	5.0 Megapixels	ISU Sensitivity	Auto/Daylight/Cloudy/Shade/
	1/1.65" (16:9), 10.4 Mega Total Pixel	1/2.5", 6.37 Mega Total Pixel CCD,	1/2.5", 6.37 Mega Total Pixel CCD,	1/2.5", 5.36 Mega Total Pixel CCD,	1/2.5", 5.36 Mega Total Pixel CCD,	White Balance	Color temperature setting (2500 to
	CCD, Primary Color Filter	Primary Color Filter Auto Focus System,		·	,	White Balance	
	AF/Macro/MF switchable, Continuous AF On/Off	Normal/Macro (dial), Continuous AF On/Off	Normal/Macro (dial)	Normal/Macro (dial)	Normal/Macro (dial)	Adjustment	Magenta/Green Bias
	1 & 9 point, 1 &3 point high-speed,	1 & 9 point, 1 & 3 point high-speed,	1 & 5 point, 1 & 3 point high-speed,	1 & 5 point, 1 & 3 point high-speed,	1 & 5 point, 1 & 3 point high-speed,		Shutter Priority AE/Manual
	Spot Yes	Spot Yes	Yes	Yes	-	Compensation	1/3 EV step, -2 - +2 EV
	Auto/I.ISO/100/200/400/800/1600 (High Sensitivity mode: 3200)	Auto/80/100/200/400/800 (High Sensitivity mode: 800 - 1600)	Auto/80/100/200/400 [High Sensitivity mode: 800 - 1600]	Auto/80/100/200/400 (High Sensitivity mode: 800 - 1600)	Auto/80/100/200/400	AE Bracket	
П	Auto/Daylight/Cloudy/Shade/ Halogen/Flash/White Set 1&2;	Auto/Daylight/Cloudy/Halogen/ White Set; Adjustable in ±10 steps	Auto/Daylight/Cloudy/Halogen/	Auto/Daylight/Cloudy/Halogen/	Auto/Daylight/Cloudy/Halogen/	Light Metering	49-Zone Multi-pattern Sensing
Ш	2-Axis Adjustable in ±9 steps	(except Auto)	(except Auto)	Jack locacycle for the maximum image size for each aspect ratio) and appear to the maximum image size for each aspect ratio) and appear to the property of the			
	Auto/Program AE/ Aperture Priority AE/	Program AE	Program AE	Program AE	Program AE	Mataria - Danas	0 - 20 EV with optical viewfinder;
H	Shutter Priority AE/Manual Auto/P/A/S/M/SCN (Portrait/	Simple/Normal/Macro/SCN 1&2	Cimple/Nerm-1/F /ht	Cimple/Nerro-1/F /ht	Cimple/Normal/Farrage	Metering Kange	(with F2.0 lens, ISO 100)
	Soft Skin/Scenery/Sports/ Night Portrait/Night Scenery/	(Portrait/Soft Skin/Scenery/Sports/ Night Portrait/Night Scenery/Food/	SCN1&2 (Portrait/Soft Skin/	SCN1&2 (Portrait/Soft Skin/	SCN1&2 (Portrait/Soft Skin/	Shutter Speed	
	Self-Portrait/Food/Party/	Party/Candle Light/Fireworks/ Starry Sky/Snow/Baby1&2/	Night Scenery/Food/Party/	Night Scenery/Food/Party/	Night Scenery/Food/Party/		JPEG(DCF/Exif 2.21 compliant),
	Beach/Aerial Photo/Snow/	High Sensitivity/Self-Portrait/ Underwater/Beach/Aerial Photo]/	Snow/Baby1&2/High Sensitivity]/	Snow/Baby1&2/High Sensitivity)/	Snow/Baby1&2)/Motion Image/		[4:3] 3136 x 2352, 2560 x 1920,
	Motion Image/Playback/Print	Motion Image/Playback	Motion Image/Playback	Motion Image/Playback	Playback	(Still Images)	2560 x 1712, 2048 x 1360;
	1/3 EV step, -2 - +2 EV	1/3 EV step, -2 - +2 EV	1/3 EV step, -2 - +2 EV	1/3 EV step, -2 - +2 EV	1/3 EV step, -2 - +2 EV	Color Space	sRGB, Adobe RGB
	Yes (in Auto mode)	Yes (in Simple mode)	Yes (in Simple mode)	Yes (in Simple mode)	Yes (in Simple mode)	Burst Shooting	3 or 2 fps; Max. 6 images (when there are RAW file),
	±1/3 EV - 1 EV step, 3 frames	±1/3 EV - 1 EV step, 3 frames Intelligent Multiple/	±1/3 EV - 1 EV step, 3 frames	· ·	·	Mode	
	Center Weighted/Spot	Center Weighted/Spot 2 steps: F2.8/F5.0 (W), F4.2/F7.1 (T)		- :	- :		Auto, Auto/Red-eye Reduction,
	Auto: 1/4 - 1/2000 sec, P: 1 - 1/2000 sec,	8 - 1/2000 sec	### Advances in 17 groups  ### Advances in 17 gr				
	Candle Light/Fireworks/Starry Sky/    Beach/Aerial Photo/Snow/    High Sensitivity/Baby18.21/    Motion Image/Playback/Print   1/3 EV step2 - 2 - 2 EV   1/3 EV step3     Yes (in Auto mode)   1/3 EV step3     Yes (in Simple   1/3 EV - 1 EV step3     Yes (in Simple   1/3 EV - 1 EV step3     Yes (in Simple   1/3 EV - 1 EV step3     Yes (in Simple   1/3 EV - 1 EV step3     Yes (in Simple   1/3 EV - 1 EV step3     Wide: F2.8 - F8.0, Tele: F4.9 - F8.0   2 steps: F2.8     Mide: F2.8 - F8.0, Tele: F4.9 - F8.0   2 steps: F2.8     Alto: 1/4 - 1/2000 sec, P: 1 - 1/2000 sec, Contrast/Sharpness/Saturation/ Noise Reduction   1/2000 sec, P: 1 - 1/2000 sec, Contrast/Sharpness/Saturation/ Noise Reduction   1/2000 sec, P: 1 - 1/2000 sec, Compliant, Paw, DePG   Compailant, Paw, DePG   Compailant, Paw, DePG   CDCF/Exif.2.2     Compliant, Paw, DePG   CDCF/Exif.2.2   Compliant, Paw, DePG   CDCF/Exif.2.2     Compliant, Paw, DePG   CDCF/Exif.2.2	(Starry Sky mode: 15/30/60 sec)					Flash Output Adjustment: -2 - +2 EV
	Noise Reduction	Natural/Standard/Vivid Still Images: JPEG [DCF/Exif2.2				Hot Shoe	TTL Auto
	compliant), RAW, DPOF compatible;	compliant), DPOF compatible; Images w/ Audio: JPEG (DCF/Exif2.2	compliant), DPOF compatible;	(DCF/Exif2.2 compliant),	(DCF/Exif2.2 compliant),		Optical Viewfinder
	compliant) + QuickTime;	compliant) + QuickTime;	compliant) + QuickTime;	Motion Images:	Motion Images:	Viewfinder	
Ш	QuickTime Motion JPEG	QuickTime Motion JPEG	QuickTime Motion JPEG	QuickTime Motion JPEG	QuickTime Motion JPEG		Magnification: approx. 0.93x; Detachable Eyepiece Shutter
	3072 x 1728, 1920 x 1080;	[4:3] 2560 x 1920, 2048 x 1536,	[4:3] 2816 x 2112, 2048 x 1536,	[4:3] 2560 x 1920, 2048 x 1536.	[4:3] 2560 x 1920, 2048 x 1536.		
	2560 x 1712, 2048 x 1360;	1600 x 1200, 1280 x 960, 640 x 480; [3:2] 2560 x 1712, 2048 x 1360;		1600 x 1200, 1280 x 960, 640 x 480;	1600 x 1200, 1280 x 960, 640 x 480;	LCD Monitor	(207k pixels), Approx.
	2304 x 1728, 2048 x 1536,	[16:9] 2560 x 1440, 1920 x 1080				December Media	SD Memory Card/
		Fine/Standard	Fine/Standard	Fine/Standard	Fine/Standard	Recording Media	MultiMediaCard
	[16:9] 1280 x 720 [15 fps]/	[4:3] 640 x 480/320 x 240,	[4:3] 640 x 480	[4:3] 640 x 480		Film Mode	Smooth Color;
	320 x 240 pixels; 30 or 10 fps	[16:9] 848 x 480 pixels; 30 or 10 fps	320 x 240 pixels; 30 or 10 fps	320 x 240 pixels; 30 or 10 fps		T III Mode	Dynamic/Smooth Color
	2 or 1 fps, Max. 5 (Standard)/ 3 (Fine) images	3 or 2 fps, Max. 5 (Standard)/ 3 (Fine) images				Direct Print	
	Yes	Yes	Yes	Yes	Yes	Interface	Analog Video: NTSC/PAL Composite
	Auto, Auto/Red-eye Reduction, Slow Sync./Red-eye Reduction,	Auto, Auto/Red-eye Reduction,	Auto, Auto/Red-eye Reduction,			Power Souces	Li-ion Battery Pack (7.2V, 1500mAh),
	Forced On/Off; Flash Output Adjustment:	Slow Sync./Red-eye Reduction, Forced On/Off	Slow Sync./Red-eye Reduction,	Slow Sync./Red-eye Reduction,	Slow Sync./Red-eye Reduction,		(Input: 110-240 V AC)
	-2 - +2 EV in 1/3 EV steps ISO Auto: 0.6 - 4.9 m (W)/	ISO Auto: 0.3 - 3.7 m (W)/				Battery Life	Leica D Elmarit12-50mm/
	0.3 - 2.2 m (T)	1.0 - 2.4 m (T)				Dimensions	F2.8-3.5 ASPH]]
	-	<u>-</u>	-	-	-	(approx.)(W x H x D)	
Н	2.8" Wide Polycrystalline TFT LCD	2.5" Polycrystalline TFT LCD Display		2.0" Polycrystalline TFT LCD Display	2.0" TET I CD Dieplay (94k pivola)	g (approx.)	Battery Charger/AC adapter,
	(207k pixels), Approx. 100% coverage	(207k pixels), Approx. 100% coverage		(85k pixels), Approx.			Body Cap, Video Cable, USB Cable,
	Built-in Memory/SD Memory Card/ SDHC Memory Card/	Built-in Memory/ SD Memory Card/	Built-in Memory/	Built-in Memory/			CD-ROM (LUMIX Simple Viewer,
	MultiMediaCard 13MB	MultiMediaCard  13.4MB	MultiMediaCard	MultiMediaCard	MultiMediaCard	ACCESSOFIES	SILKYPIX Developer Studio,
	Yes/Yes	Yes/Yes	Yes/No	No/No	No/No		
	DC Input, AV Output (NTSC/PAL), USB PictBridge	DC Input, AV Output (NTSC/PAL), USB PictBridge					14-50mm/F2,8-F3.5 ASPH
	Li-ion Battery Pack (3.7V, 1150mAh), AC Adapter (optional)		Two AA or LR6 Batteries,	Two AA or LR6 Batteries,	Two AA or LR6 Batteries,	Lens Construction	
		250 images (CIPA**)				Mount	Four Thirds mount
Ш	105.7 x 55.8 x 26.3 mm	112 x 58.1 x 40.2 mm				MEGA 0.I.S.	On/Off (selectable Mode1/2
	187 g (camera body only) Battery Charger, Battery Pack,	234 g (camera body only) Battery Charger, Battery Pack,				Focal Length	f=14 to 50 mm
	Battery Carrying Case, Lens Cap,	Lens Cap, AV Cable, AC Cable, USB Cable, Strap,	USB Cable, Strap,	Video Cable, USB Cable, Strap,	Video Cable, USB Cable, Strap,	_	
	USB Cable, Strap, CD-ROM (LUMIX Simple Viewer,	CD-ROM (LUMIX Viewer, PHOTOfunSTUDIO-viewer-,	ArcSoft PhotoBase,	ArcSoft PhotoBase,	ArcSoft PhotoBase,	Aperture Range	F2.8 (W) - F3.5 (T)
	PhotofunStudio-viewer-, ArcSoft PhotoImpression,	ArcSoft PhotoBase, ArcSoft PhotoImpression,				Closest Focusing	
	ArcSoft PanoramaMaker,	ArcSoft PhotoImpression, ArcSoft Panorama Maker, USB Driver)					-
	SILKYPIX Developer Studio, Adobe Reader, QuickTime,	OSB DITVELT				of View	
Н	USB Driver)						
						Overall Length	102.8 mm
					nable pictures varies depending on the	Standard	Lens Cap, Lens Hood,
	, and a second s			PhotoBase™, PhotoImpression™, Pa		Accessories	Lens Rear Cap, Lens Storage Bag

\*LUMIX Simple Viewer, PHOTOfunSTUDIO-viewer-: Require Microsoft® Windows® 985E/Me/2000/XP. ArcSoft® PhotoBase¹M. PhotoImpression¹M. Panorama Maker¹M: Require Microsoft® Windows® 98/985E/Me/2000/XP, or Apple® Mac OS® 9 or X (Classic mode). SILKYPIX® Developer Studio: Requires Microsoft® Windows® 985E/Me/2000/XP (Recommending Windows® 2000/XP, Only a systems administrator with authority to install software on a Windows® XP/2000), or Apple® Mac OS® X v10.2 or newer (Version 10.3 or later is recommended). \*Weight and dimensions shown are approximate. \*Design, functions, and specifications are subject to change without notice. \*Some sample images are simulated. \*Some accessories are not available in some countries. \*The use of recorded or printed materials that are protected by copyright for any purpose other than personal enjoyment is prohibited, as it would infringe upon the rights of the copyright holder. \*Leica is a registered trademark of Leica Microsystems IR GmbH. \*Elimarit is registered trademark of Leica Camera AG. \*LEICA DC VARIO-ELMARIT, LEICA D VARIO-ELMARIT lenses are manufactured using measurement instruments and quality assurance systems that have been certified by Leica Camera AG based on the company's quality standards. \*Microsoft® and Windows® are either registered trademarks or trademarks or trademarks or Adobe® Reader¹M are trademarks of Adobe Systems Incorporated in the United States and/or other countries. \*Apple® and Mac OS® are either registered trademarks or trademarks or Apple Computer, Inc., used under license.\*Other names of systems and products mentioned in this brochure are usually the registered trademarks or trademarks of the manufacturers who developed the system or product concerned.



#### Still Image Recording Capacity and Moving Image Recording Time : Fine : Standard 970 1910 4:3 2048 x 1536 (3M) 600 1180 2360 1600 x 1200 (2M) 3600 x 2400 (8M) 112 110 3248 x 2160 (7M) 2560 x 1712 (4.5M) 1100 1740 69 110 270 440 210 430 840 110 130 2560 1070 1060 130 3584 x 2016 (7M) 2110 34 68 260 530 16:9 46 115 360 910 710 1720 1420 3410 860 440 x 480 30 fps 10 fps 10 fps 30 fps 330 se 320 x 240 22970 sec 7910 sec 1970 sed 980 sec 490 sec 16:9 848 x 480 140 sec 30 fps 280 sec 1160 sec LZ5/LZ3/LS2 FZ7 4 8 41 82 81 160 160 320 320 640 660 1270 5 10 50 99 98 190 195 380 390 770 790 1530 6 41 82 12 81 160 25 160 320 51 320 640 100 660 1270 9 61 120 19 120 230 38 240 470 76 480 940 150 970 1860 4:3 1600 x 1200 (2M) 39 240 470 78 480 940 155 970 1880 310 1920 3610 20 | 39 | 190 | 350 | 370 | 690 | 730 | 1370 | 1470 | 2740 | 2920 | 5120 | 67 | 110 | 600 | 970 | 1170 | 1900 | 2320 | 3770 | 4640 | 7550 | 8780 | 12290 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6750 | 6 115 : 600 : 970 | 230 :1170:1900 | 450 :2320:3770 | 910 :4640:7550 | 1800:8780:1229 7 46 92 14 91 180 28 180 350 57 360 710 115 730 142( 13 88 165 27 170 330 54 340 650 105 680 1310 210 1360 256 4 9 46 92 91 180 180 350 360 710 730 1420 5 11 56 110 110 210 210 430 440 860 890 1700 3:2 2048 x 1360 (2.5M) 8 55 105 17 105 210 33 210 420 67 430 850 135 870 1700 18 115 220 36 230 430 72 450 860 145 910 1720 290 1800 3410 16:9 1920 x 1080 (2M) 5 11 55 105 105 210 210 420 430 850 870 1700 16:9 10 fps 30 fps 640 x 480 490 sec 980 sec 320 sec 1970 sec 660 sec 4020 sec 4:3 2870 se 5700 se 1970 se 11700 se 250 sec 490 sec 980 sec 1970 sec 4020 sec 80 sec 160 sec 320 sec 660 sec 1350 sec 320 x 240 640 x 480 16:9 848 x 480 320 x 240 30 fps 140 se 1160 sec 30 fps | 25 sec | 250 sec | 490 sec | 980 sec | 1970 sec | 4020 sec 280 sed 3648 x 2736 (7.5M) 2880 x 2160 (6M) 78 150 310 610 1220 1240 2410 2048 x 1536 (3M) 150 150 290 300 1180 590 600 1220 2360 2410 4640 240 350 280 x 960 (1M) 370 5740 10050 1370 1470 2740 2920 5120 910 1800 1100 2150 450 540 3248 x 2160 (7M) 560 1090 3 : 2 3840 x 2160 (8M) 29 59 58 115 115 230 230 460 470 930 930 1820 115 10 fps 30 fps 250 sec 83 sec 1970 se 660 sec 440 x 480 165 sec 320 x 240 30 fps 15 fps 7910 se 24 sec 490 sec 980 se 4020 sed 1280 x 720 61 sec 215 sec 490 sec 1690 sec 848 x 480 10 fps 30 fps 6790 sec 16 : 9 3450 sec 420 sec 71 sec 140 sec 280 se 560 sec 1160 sed 41 82 81 160 160 320 320 640 660 1270 78 150 150 290 300 590 600 1180 1220 2360 8 41 82 81 160 160 320 320 640 660 1270 1290 2510 16 78 150 150 290 300 590 600 1180 1220 2360 2410 4640 125 | 240 | 240 | 470 | 480 | 940 | 970 | 1880 | 1920 | 3610 190 | 350 | 370 | 690 | 730 | 1370 | 1470 | 2740 | 2920 | 5120 26 | 125 | 240 | 240 | 470 | 480 | 940 | 970 | 1880 | 1920 | 3610 | 3770 | 7090 | 38 | 190 | 350 | 370 | 690 | 730 | 1370 | 1470 | 2740 | 2920 | 5120 | 5740 | 10050 | 1280 x 960 (1M) 1280 x 960 (1M) 600 970 1170 1900 2320 3770 4640 7550 8780 12290 46 92 91 180 180 350 360 710 730 1420 6 600 970 1170 1900 2320 3770 4640 7550 8780 12290 17240 24130 46 92 91 180 180 350 360 710 730 1420 1450 2800 2816 x 1880 (0.3M) 2816 x 1880 (5M) 2048 x 1360 (2.5M) 88 165 170 330 340 650 680 1310 1360 2560 2816 x 1584 (4.5M) 55 105 105 210 210 420 430 850 870 1700 5 11 55 105 105 210 210 420 430 850 870 1700 1720 3350 2816 x 1584 (4.5M) 16:9 16:9 250 sec 490 sec 83 sec 165 sec 640 x 480 640 x 480 165 sec 4:3 4:3 740 sec 1440 sec 2870 sec 5700 sec 11700 sec 22970 sec 250 sec 490 sec 980 sec 1970 sec 4020 sec 7910 sec 320 x 240 848 x 480 10 fps 16:9 848 x 480 30 fps 71 sec 140 sec 280 sec 560 sec 1160 sec 2280 sec

		30 tps	71	sec	140 sec		280 sec		560 sec		1160 sec			
FX	50/FX0	7	128	МВ	MB 256MB		512MB		1GB		2GB		4GB	
Aspect Ratio	Still Image	:												
	3072 x 230	4 (7M)	35	69	68	135	135	270	270	540	550	1090	1090	2150
	2560 x 192	0 (5M)	50	99	98	190	195	380	390	770	790	1530	1560	3010
4:3	2048 x 153	6 (3M)	78	150	150	290	300	590	600	1180	1220	2360	2410	4640
	1600 x 120	1600 x 1200 (2M)		240	240	470	480	940	970	1880	1920	3610	3770	7090
	1280 x 960	(1M)	190	350	370	690	730	1370	1470	2740	2920	5120	5740	10050
	640 x 480	0.3M)	600	970	1170	1900	2320	3770	4640	7550	8780	12290	17240	24130
3:2	3072 x 204	8 (6M)	39	78	77	150	150	300	300	600	620	1220	1230	2410
3:2	2048 x 136	0 (2.5M)	88	165	170	330	340	650	680	1310	1360	2560	2680	5020
16:9 3072 x	3072 x 172	8 (5M)	46	92	91	180	180	350	360	710	730	1420	1450	2800
10:7	1920 x 1080 (2M)		115	220	230	430	450	860	910	1720	1800	3410	3540	6700
Aspect Ratio	Moving Image													
	640 x 480	10 fps	250 sec		490	490 sec		980 sec		1970 sec		) sec	7910 sec	
4:3	040 X 400	30 fps	83	sec	165	sec	330 sec		660 sec		1350 sec		2660 sec	
4:3	320 x 240	220 x 240 10 fps		740 sec		1440 sec		2870 sec		5750 sec		0 sec	2297	0 sec
	320 X 240	30 fps	250	sec	490	sec	980 sec		1970 sec		4020 sec		7910 sec	
16:9	848 x 480	10 fps	215	sec	420	sec	840 sec		1690 sec		3450 sec		6790 sec	
10:7	040 X 400	30 fps	71	sec	140 sec		280 sec		560 sec		1160 sec		2280 sec	

TZ1		Built-in Memory (Approx. 13.4MB)		128	МВ	256MB		512MB		1GB		2GB			
	Aspect Ratio	Still Image													
4:3		2560 x 192	(5M)	5	10	50	99	98	190	195	380	390	770	790	1530
		2048 x 1536 (3M)		8	16	78	150	150	290	300	590	600	1180	1220	2360
	4:3	1600 x 120	0 (2M)	13	27	125	240	240	470	480	940	970	1880	1920	3610
	1280 x 960 (1M)		20	39	190	350	370	690	730	1370	1470	2740	2920	5120	
ı		640 x 480 (0.3M)		67	105	600	970	1170	1900	2320	3770	4640	7550	8780	12290
2	3:2	2560 x 171	2 (4.5M)	5	11	56	110	110	210	210	430	440	860	890	1700
	3:2	2048 x 1360 (2.5M)		9	18	88	165	170	330	340	650	680	1310	1360	2560
	16:9	2560 x 1440 (3.5M)	6	14	66	130	130	250	250	510	520	1020	1040	2040	
	10:7	1920 x 1080 (2M)		12	24	115	220	230	430	450	860	910	1720	1800	3410
Aspect Ratio Moving Image															
		/ / 0 / 00	10 fps		- 25		sec	ec 490 sec		980	sec	1970 sec		4020 sec	
	4:3	640 x 480	30 fps	-		83 sec		165 sec		330 sec		660 sec		1350 sec	
ı	4:3	320 x 240	10 fps	88	88 sec 7		sec	1440 sec		2870 sec		5700 sec		11700 sec	
ı			30 fps	25 sec		250 sec		490 sec		980 sec		1970 sec		4020 sec	
ı	16:9	848 x 480	10 fps	-		215 sec		420 sec		840 sec		1690 sec		3450 sec	
	10:7	040 X 400	30 fps		- 71		sec	140 sec		280 sec		560 sec		1160 sec	

These figures vary depending on the subject being photographed. In motion image mode, when you set the picture quality 640x480-pixel size at 30fps, we recommend using a high-speed SD Memory Card with "10MB/s" or greater displayed on the package.

\*\*The maximum time for each recording is 6000 sec at 10fps, or 2000 sec at 30fps





